

**Amendments to the Claims:**

1. (currently amended) A hybrid ~~Hybrid~~ bacterial toxin subunit comprising an A1-part of Shiga-toxin or Shiga-like toxin fused to an A2-part of Escherichia coli heat-labile enterotoxin.
2. (currently amended) The hybrid ~~Hybrid~~ bacterial toxin subunit according to claim 1, ~~characterized in that~~ wherein the A1-part is the ~~[[an]]~~ A1-part of Stx2e.
3. (currently amended) A hybrid ~~Hybrid~~ bipartite bacterial toxin comprising five B-subunits of Escherichia coli heat-labile enterotoxin and the hybrid bacterial toxin subunit according to claim 1, ~~[[or 2]]~~ wherein the A1-part is optionally the A1-part of Stx2e.
4. (currently amended) A nucleic ~~Nucleic~~ acid molecule comprising a nucleotide sequence encoding ~~[[a]]~~ the hybrid bacterial toxin subunit according to claim 1, ~~[[or 2]]~~ wherein the A1-part is optionally the A1-part of Stx2e.
5. (currently amended) A DNA fragment comprising ~~[[a]]~~ the nucleic acid molecule according to claim 4.
6. (currently amended) A recombinant ~~Recombinant~~ DNA molecule comprising
  - (i) ~~[[a]]~~ the nucleic acid molecule according to claim 4 under the control of a functionally linked promoter, or
  - (ii) a DNA fragment comprising the nucleic acid molecule according to claim 4 ~~[[5]]~~, under the control of a functionally linked promoter.
7. (currently amended) A live ~~Live~~ recombinant carrier comprising
  - (i) ~~[[a]]~~ the nucleic acid molecule according to claim 4,

- (ii) a DNA fragment comprising the nucleic acid molecule according to claim 4, [[5]]  
or
  - (iii) a recombinant DNA molecule comprising (i) or (ii) according to claim 6.
- 8. (currently amended) A host ~~Host~~ cell comprising
  - (i) [[a]] the nucleic acid molecule according to claim 4,
  - (ii) a DNA fragment comprising the nucleic acid molecule according to claim 4 [[5]],
  - (iii) a recombinant DNA molecule comprising (i) or (ii) under the control of a functionally linked promoter, according to claim 6 or
  - (iv) a live recombinant carrier comprising (i), (ii) or (iii) according to claim 7.
- 9. (cancelled)
- 10. (currently amended) A vaccine ~~Vaccine~~ comprising [[a]] the hybrid bacterial toxin subunit according to claim 1 ~~or 2 or a hybrid bipartite bacterial toxin according to claim 3,~~ and a pharmaceutically acceptable carrier, wherein the A1-part is optionally the A1-part of Stx2e.
- 11. (currently amended) A vaccine ~~Vaccine~~ comprising [[a]] the nucleic acid molecule according to claim 4, ~~a DNA fragment according to claim 5, or a recombinant DNA molecule according to claim 6~~ and a pharmaceutically acceptable carrier.
- 12. (currently amended) A vaccine ~~Vaccine~~ comprising [[a]] the live recombinant carrier according to claim 7 ~~or a host cell according to claim 8~~ and a pharmaceutically acceptable carrier.
- 13. (currently amended) A vaccine ~~Vaccine~~ comprising antibodies against [[a]] the hybrid bacterial toxin subunit according to claim 1 ~~or 2 or a hybrid bipartite bacterial toxin according to claim 3,~~ and a pharmaceutically acceptable carrier, wherein the A1-part is optionally the A1-part

of Stx2e.

14. (currently amended) The vaccine ~~Vaccine~~ according to claim 10 ~~any of claims 10-13,~~  
~~characterized in that~~ wherein said vaccine further comprises an additional antigen derived from a  
virus or micro-organism pathogenic to humans or animals, an antibody against said antigen or  
genetic information encoding said antigen.

15. (currently amended) The vaccine ~~Vaccine~~ according to claim 14, ~~characterized in that~~  
wherein said vaccine comprises a virus or micro-organism ~~[[is]]~~ selected from the group  
consisting of Pseudorabies virus, Porcine influenza virus, Porcine parvo virus, Transmissible  
gastro-enteritis virus, Rotavirus, *Brachyspira hyodysenteriae*, *Escherichia coli*, *Erysipelothrix*  
*rhusiopathiae*, *Bordetella bronchiseptica*, *Brachyspira hyodysenteriae*, *Shigella sp.*, *Salmonella*  
*choleraesuis*, *Salmonella typhimurium*, *Salmonella enteritidis*, *Haemophilus parasuis*,  
*Pasteurella multocida*, *Streptococcus suis*, *Mycoplasma hyopneumoniae*, *Actinobacillus*  
*pleuropneumoniae*, *Staphylococcus hyicus* and *Clostridium perfringens*.

16. (currently amended) A method of combatting *Shigella* or *Escherichia coli* infection  
comprising administering an effective amount of ~~Use of~~

(i) ~~[[a]]~~ the hybrid bacterial toxin subunit according to claim 1 ~~[[or 2]]~~, or  
(ii) a hybrid bipartite bacterial toxin comprising five B-subunits of *Escherichia coli*  
heat-labile enterotoxin and the hybrid bacterial toxin subunit according to claim 1 ~~according to~~  
~~claim 3,~~

wherein the A1-part is optionally the A1-part of Stx2e

~~a nucleic acid molecule according to claim 4,~~

~~a DNA fragment according to claim 5,~~

~~a recombinant DNA molecule according to claim 6,~~

~~a live recombinant carrier according to claim 7, or~~

~~a host cell according to claim 8 for the manufacture of a vaccine for combating *Shigella* or *Escherichia coli* infection.~~

17. (currently amended) A method ~~Method~~ for the preparation of a vaccine according to ~~claims 10-15~~, said method comprising the admixing of

~~the [[a]] hybrid bacterial toxin subunit according to claim 1 or 2, a hybrid bipartite bacterial toxin according to claim 3, a nucleic acid molecule according to claim 4, a DNA fragment according to claim 5, a recombinant DNA molecule according to claim 6, a live recombinant carrier according to claim 7, a host cell according to claim 8, or antibodies against a toxin according to claim 1-3, and~~

~~a pharmaceutically acceptable carrier, wherein the A1-part is optionally the A1-part of Stx2e.~~

18. (new) A vaccine comprising the hybrid bipartite bacterial toxin according to claim 3 and a pharmaceutically acceptable carrier, wherein the A1-part is optionally the A1-part of Stx2e.

19. (new) A vaccine comprising the DNA fragment according to claim 5 and a pharmaceutically acceptable carrier.

20. (new) A vaccine comprising the recombinant DNA molecule according to claim 6 and a pharmaceutically acceptable carrier.

21. (new) A vaccine comprising the host cell according to claim 8 and a pharmaceutically acceptable carrier.